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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,800	12/21/2006	Heiko Harnischfeger	66967-0008	6368
84362	7590	03/09/2009		
GKN Driveline/ITG c/o Kristin L. Murphy 39533 Woodward Avenue, suite 140 Bloomfield Hills, MI 48304			EXAMINER BINDA, GREGORY JOHN	
			ART UNIT 3679	PAPER NUMBER
			MAIL DATE 03/09/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/568,800

**Applicant(s)**

HARNISCHFEGER, HEIKO

**Examiner**

Greg Binda

**Art Unit**

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

*Drawings*

1. The drawings are objected to because:
  - a. Reference numerals 11+ are used to identify features in Fig. 2b and reused to identify modifications of those features in Fig. 2a. Such usage is proscribed. See MPEP § 608.02(e).
  - b. The drawings fail to show the claimed invention because they fail to show the limitations in the last paragraph of claim 5. Fig. 2a shows the length X2 of the second cage window as equal to, not smaller than, the length X1 of the first cage window.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

3. The disclosure is objected to because:
  - a. Page 5, line 19 describes the reference character X1 as the length of the first cage window 18, but in Fig. 2a, X1 indicates the length of the second window 19.
  - b. Page 5, line 21 describes the reference character X2 as the length of the second cage window 19, but in Fig. 2a, X2 indicates the length of the first window 18.
  - c. Page 5, lines 19-24, describes the length of the first cage windows 18 as greater than the length of the second cage windows 19, but in lines 25+ the length of the cage windows 18 is described as reduced.
  - d. Page 5, line 24 and page 6, line 7 & 8 describe “second cage window 18” but at page 5, line 20 the second cage window is identified by reference numeral 19.
4. The specification is objected to as failing to provide proper antecedent basis for the subject matter in claims 7 & 8. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ouchi et al, US 2001/0024975 (Ouchi). Figs. 9-12 show a constant velocity twin ball joint 301C comprising:

an outer joint part 303B which comprises a first longitudinal axis and an attaching end (left end in Fig. 9) and an aperture end (right end in Fig. 9) positioned axially opposite one another, and outer ball tracks 308;

an inner joint part 302A which comprises a second longitudinal axis and an attaching mechanism 348 for a shaft pointing towards the aperture end of the outer joint part, and inner ball tracks 307, the outer ball tracks and the inner ball tracks form pairs of tracks with one another which each accommodate balls, and circumferentially adjoining pairs of tracks comprise center lines of the outer and inner ball tracks which, when the first and second axes are aligned, are positioned in planes which extend parallel relative to one another and are symmetric relative to the first and second axes; and

a ball cage 309c between the outer joint part and the inner joint part and comprising circumferentially distributed cage windows 310d, 310e which each accommodate pairs of balls of adjoining pairs of tracks positioned in the parallel planes, wherein a circumferential length  $L_{310e}/3$  of second cage windows 310e for second pairs of balls the two balls 304 at opposite ends of each pocket 310e) is smaller (see paragraph 0179) than a circumferential length  $L_{310d}/2$  of first cage windows 310d for first pairs of balls 304.

In paragraph 0179, Ouchi discloses the method of assembling the joint 301C comprising the steps of inserting the first pairs of balls 304 one after the other through the first cage windows 310d of the joint while being over-articulated (see also Fig. 31); and thereafter, inserting the

second pairs of balls one after the other through the second cage windows 310e of the joint while being over-articulated.

*Conclusion*

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. DE 103 37 918 shows a constant velocity twin ball joint.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 10:30 am to 8:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/

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Primary Examiner

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